



DELDOT BRIDGES

Description:

DeIDOT is responsible for 1,779 bridge structures. Of these, 326 are on the NHS (NBI), with an additional 12 owned by DRBA and 2 owned by the USACE. Any DeIDOT-owned structure spanning over a roadway or waterway with a hydraulic opening greater than 20 square feet and a minimum vertical clearance of 4' is considered to be a bridge. Bridge inspection program is required as per the Code of Federal Regulations (NBIS) by the FHWA for NBI bridges only. However, the FHWA strongly encourages State DOTs to inspect smaller bridge & culvert structures

Annual Budget:

DeIDOT spent ~\$55M in 2021 and the expected average annual budget for the next 3 years is \$77.8M. This includes \$17.8M of State funds, and \$60M of Federal funds. This excludes projects that are funded through special pots of money, grants, or funding outside of our Bridge preservation, Bridge Management, and Bridge Painting Programs.

Asset Valuation:

The current valuation of DeIDOT's bridge assets is estimated to be \$2.78B with the culvert bridge population accounting for ~14%.

STATE OF GOOD REPAIR

SOGR for bridges is defined using the minimum assigned NBI Condition Rating. DeIDOT defines SOGR as follows:

DeIDOT Bridge Program

Good Condition: NBI Rating ≥ 6
 Poor Condition: NBI Rating ≤ 4

NHS Bridge Program

Good Condition: NBI Rating ≥ 7
 Poor Condition: NBI Rating ≤ 4

TARGETS AND MEASURES

DeIDOT Bridge Performance Goals

of Bridges in Good Condition > 75%
 # of Bridges in Poor Condition < 2.5%

NHS Bridge 2-Year Performance Targets

Deck Area in Good Condition > 15%
 Deck Area in Poor Condition < 2%

INVENTORY & CONDITION

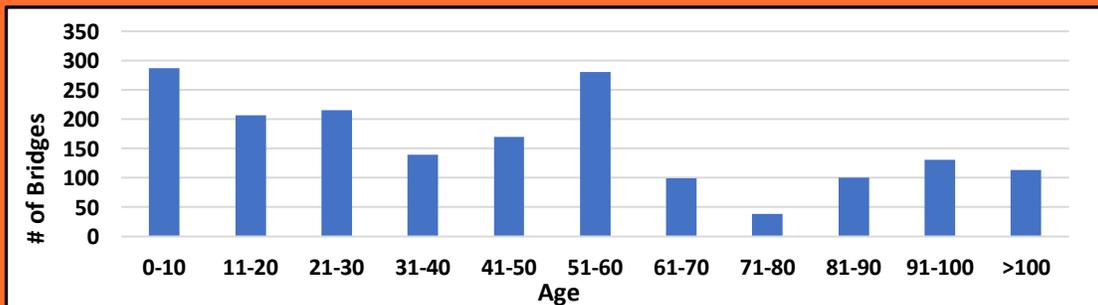
2021 Bridge Condition Rating Summary

Condition Rating	All DeIDOT Bridges		DeIDOT NBI Bridges		DeIDOT State Bridges	
	# of Bridges	% of Bridges	# of Bridges	% of Bridges	# of Bridges	% of Bridges
Poor (≤ 4)	29	1.6%	11	1.3%	18	1.9%
Fair = 5	255	14.3%	149	17.7%	106	11.3%
Good (≥ 6)	1495	84.0%	681	81.0%	814	86.8%
Total =	1,779	100.0%	841	100.0%	938	100.0%

2021 NHS Bridge Condition Rating Summary

Condition Rating	All NHS Bridges		DeIDOT Bridges		Army Corps Bridges		DRBA	
	Deck Area (ft ²)	% Deck Area	Deck Area (ft ²)	% Deck Area	Deck Area (ft ²)	% Deck Area	Deck Area (ft ²)	% Deck Area
Poor (≤ 4)	-	0.0%	-	0.0%	-	0.0%	-	0.0%
Fair = 5 & 6	6,877,008.02	81.1%	5,007,820.73	76.7%	723,607.65	100.0%	1,145,579.64	93.0%
Good (≥ 7)	1,603,302.25	18.9%	1,517,076.72	23.3%	-	0.0%	86,225.53	7.0%
Total =	8,480,310.26	100.0%	6,524,897.45	100.0%	723,607.65	100.0%	1,231,805.17	100.0%

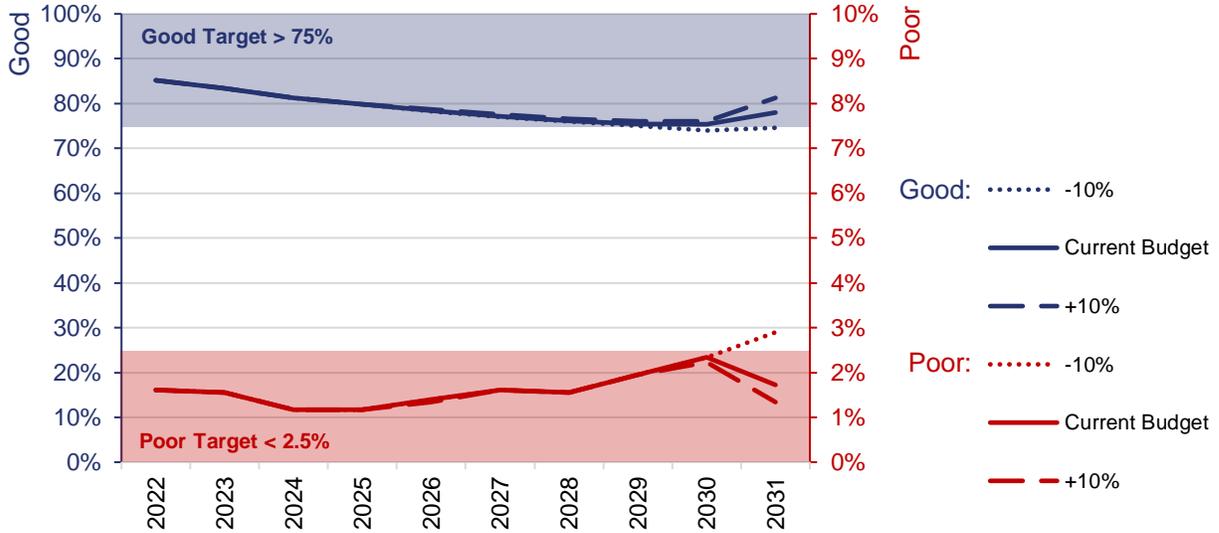
BRIDGE AGE DISTRIBUTION



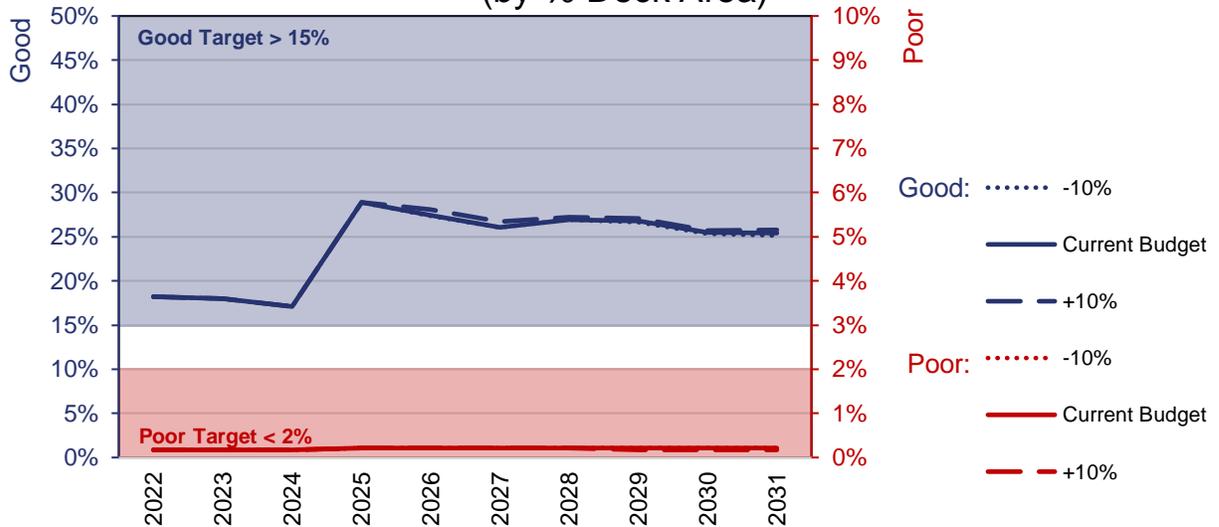


BRIDGE PERFORMANCE PROJECTIONS

DeIDOT Bridge Program: 10-Year Performance Forecast
(by % # of Bridges)



NHS Bridge Program: 10-Year Performance Forecast
(by % Deck Area)



POTENTIAL RISKS

Fracture Critical Bridges: These are steel bridges that contain members whose failure would cause partial or full failure of the bridge. These bridges require more in-depth inspections to monitor for fatigue cracking to prevent damage and potential failure.

Scour Critical Bridge Population: These are bridges that have either been identified as having the potential to scour beyond the footings/piles through analysis or a pre-screening evaluation, or have advanced scour damage that requires monitoring.

Large Rain/Storm Events: These types of events may result in increased water flow or overtopping that can cause advanced scour, settlement of the bridge, or a complete bridge failure.

Traffic Impact: Overheight trucks that strike overpass bridges are a concern for the structural integrity of the bridge, as well as, safety of motorists driving over or under the overpass bridge.